

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An artificial ear comprising: a sending unit (2) configured to convert a sound having a predetermined frequency into an electric signal and send the electric signal; and a reception unit (3) configured to receive the sent electric signal and apply it to a predetermined nerve in a cochlea, characterized in that wherein:

said sending unit (2) includes:

a plurality of resonators (21b) which have resonant frequencies different from each other and vibrate with sounds having same frequencies as the resonant frequencies;

a conversion section (21) configured to convert vibration of each of said plurality of resonators (21b) into a signal corresponding to level of the vibration; and

a sending section (28) configured to send a predetermined signal among signals converted by said conversion section (21) to said reception unit (3); and

said reception unit (3) includes:

a plurality of electrodes (4a) which are connected to nerves present in the cochlea and each corresponding to different frequencies from each other; and

a supply section (34) configured to supply a signal supplied from said sending section (28) to a predetermined electrode among said plurality of electrodes (4a) thereby stimulating a nerve corresponding to a predetermined frequency [[,]] ; and

said plurality of resonators (21b) have their ends at one side held independent from each other.

2. (Currently Amended) The artificial ear according to claim 1, ~~characterized in that~~ wherein said sending unit (2) further includes an amplifying section (22) configured to amplify a signal converted by said conversion section (21) by a gain which varies in accordance with the respective resonant frequencies possessed by said plurality of resonators (21b).

3. (Currently Amended) The artificial ear according to claim 2, ~~characterized in that~~ wherein said sending section (28) includes a first selection section (23) configured to select a signal to be sent to said reception unit (3) from signals amplified by said amplifying section (22).

4. (Currently Amended) The artificial ear according to claim 3, ~~characterized in that~~ wherein said supply section (34) includes a second selection section (32) configured to select an electrode (4a) to which a signal from said sending section (28) is to be supplied.

5. (Currently Amended) The artificial ear according to claim 4,
~~characterized in that~~ wherein:

said sending section ~~(28)~~ sends a start signal representing a start of operation by said first selection section ~~(23)~~ and an end signal representing an end of operation by said first selection section ~~(23)~~ to said reception unit ~~(3)~~ in order to synchronize selection operations of said first selection section ~~(23)~~ and second selection section ~~(32)~~ with each other ~~[[,]]~~ ; and

said second selection section ~~(32)~~ starts operating in response to the start signal and finishes operating in response to the end signal.

6. (Currently Amended) The artificial ear according to claim 2,
~~characterized in that~~ wherein said sending unit ~~(2)~~ further includes a storage section ~~(25)~~ configured to store gains for the respective resonant frequencies possessed by said plurality of resonators ~~(21b)~~.

7. (Currently Amended) The artificial ear according to claim 1,
~~characterized in that~~ wherein said plurality of resonators ~~(21b)~~ have their ends at the other side connected to a support shaft ~~(21a)~~ and supported by said support shaft ~~(21a)~~.

8. (Currently Amended) The artificial ear according to claim 7,
~~characterized in that~~ said plurality of resonators ~~(21b)~~ are arranged on both sides of said support shaft ~~(21a)~~.

9. (Currently Amended) The artificial ear according to claim 8, ~~characterized in that~~ wherein said plurality of resonators ~~(21b)~~ have different lengths from each other and are arranged on said support shaft ~~(21a)~~ in an order of a larger length to a smaller length from one end toward the other end of said support shaft ~~(21a)~~.